

PhD Candidate Position in Macromolecular Chemistry

in the group of Prof. Dr Guillaume Delaittre; Chair of Macromolecular Chemistry, University of Düsseldorf, Germany; <https://www.macrochem.hhu.de/>

Our group, located at the University of Düsseldorf (HHU), develops innovative polymeric and colloidal materials at the interface of chemistry, materials science, and biotechnology. Our research focuses on bio-based, degradable, biocompatible, and functional polymers, polysaccharides, protein–polymer conjugates, and nanomaterials derived from these systems, with the aim of advancing sustainable materials and biomedical applications.

As a doctoral candidate, your research will deal with the synthesis and modification of small organic molecules and novel synthetic polymers and their implementation into nanomaterials. Besides state-of-the-art macromolecular synthesis protocols (reversible-deactivation radical polymerizations, ring-opening polymerizations), you will use a plethora of analytical methods ranging from NMR, UV-Vis, IR, and RAMAN spectroscopies, size-exclusion chromatography, mass spectrometry to differential scanning calorimetry, thermogravimetric analysis, dynamic light scattering, SEM, TEM, and SAXS, all available in our group and faculty. You will also be involved in the supervision of Bachelor and Master theses, as well as in practical courses in macromolecular chemistry or organic chemistry.

The **University of Düsseldorf (Heinrich Heine University)** is a dynamic research institution with around **34 000 students and 4 000 academic staff**, offering excellent facilities and a strong support for internationals through its Junior Scientist and International Researcher Center ([JUNO](#)). Located in **Düsseldorf**, a vibrant and cosmopolitan city with **over 650 000 residents**, it combines world-class research opportunities with an outstanding quality of life—featuring a thriving cultural scene, a renowned international airport, one of Germany’s highest rankings for livability (#25 worldwide) and for expats (top 3 in Germany). With its blend of innovation, career prospects, and a welcoming atmosphere, Düsseldorf is the perfect place for young scientists to work and thrive.

The ideal candidate looks forward to working in a **collaborative and multicultural team** and holds a **Master degree** in (bio)chemistry with experience in **macromolecular synthesis and characterization** (or at least organic synthesis). She/he should have experience with several of the aforementioned **analytical methods**. **Strong social and communication skills**, and an **excellent** level of **English** are essential, as well as a strong motivation to mentor students in practical courses and thesis completion. Proficiency in German is a strong advantage. Candidates who are not yet fluent should be willing to quickly learn the language.

<i>Application material</i>	cover letter, CV, University certificates, contact details of 2–3 referees
<i>Application deadline</i>	August 21, 2026
<i>Planned starting date</i>	October–November 2026
<i>Contract duration</i>	3 years (1 + 2)
<i>Salary</i>	> 1700 Euro after taxes (50% E13 German salary scale)

Please send your **complete*** application material to Prof. Dr G. Delaittre with “PhD Application 2026-1” as subject ASAP! (✉ delaittre.lab@gmail.com)

*The CV should include a list of synthetic methods (including purification techniques, e.g., column chromatography, recrystallization) and characterization methods **with hands-on experience**. Incomplete applications will not be considered.